

CLAIMS

What is claimed is:

- 1 1. A method for selecting a gateway proximal to a network access point
2 that satisfies a predefined call service on a hybrid network including a
3 directory service to route a call, comprising the steps of:
4 (a) transmitting a query including a type of call service to the directory
5 service to obtain a plurality of gateways that match the predefined call
6 service criteria;
7 (b) querying each of the plurality of gateways to determine a network
8 topology to service the call;
9 (c) ranking the plurality of gateways based on the network topology and
10 the call service criteria; and
11 (d) utilizing the selected gateway to service the call.
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13 2. The method as recited in claim 1, wherein the topology of the hybrid
14 network is analyzed utilizing an internet protocol ping.
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16 3. The method as recited in claim 1, wherein the topology of the hybrid
17 network is analyzed utilizing an internet protocol trace route.
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19 4. The method as recited in claim 1, wherein the topology of the hybrid
20 network is analyzed utilizing an internet protocol packet latency.
21
22 5. The method as recited in claim 1, wherein the topology of the hybrid
23 network is analyzed utilizing a packet echo.

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6. The method as recited in claim 1, wherein the topology of the hybrid network is analyzed utilizing an internet protocol ping.

7. A hybrid network, which comprises:

(a) a switched communication network;

(b) a packet transmission network coupled to the switched communications network;

(c) a plurality of gateways between the switched communication network and the packet network

(d) a call router coupled to the switched communications network and the packet transmission with logic that transmits a query including a type of call service to the directory service to obtain a plurality of gateways that match the predefined call service criteria; querying each of the plurality of gateways to determine a network topology to service the call; ranking the plurality of gateways based on the network topology and the call service criteria; and utilizing the selected gateway to service the call.

8. The hybrid network as recited in claim 7, wherein the topology of the hybrid network is analyzed utilizing an internet protocol ping.

9. The hybrid network as recited in claim 7, wherein the topology of the hybrid network is analyzed utilizing an internet protocol trace route.

10. The hybrid network as recited in claim 7, wherein the topology of the hybrid network is analyzed utilizing an internet protocol packet latency.

1 11. The hybrid network as recited in claim 7, wherein the topology of the
2 hybrid network is analyzed utilizing a packet echo.

1 12. The hybrid network as recited in claim 7, wherein the topology of the
2 hybrid network is analyzed utilizing an internet protocol ping.

1 13. A computer program embodied on a computer-readable medium for
2 directing calls and providing services in a hybrid telecommunications
3 system including a switched communications network and a packet
4 transmission network, which comprises:

- 5 (a) first software that selects a gateway proximal to a network access
6 point that satisfies a predefined call service on a hybrid network
7 including a directory service to route a call, comprising the steps of:
8 (b) second software that transmits a query including a type of call service
9 to the directory service to obtain a plurality of gateways that match
10 the predefined call service criteria;
11 (c) third software that queries each of the plurality of gateways to
12 determine a network topology to service the call;
13 (d) fourth software that ranks the plurality of gateways based on the
14 network topology and the call service criteria; and
15 (e) fifth software that utilizes the selected gateway to service the call.

1 14. The computer program embodied on a computer-readable medium for
2 directing calls and providing services in a hybrid telecommunications
3 system including a switched communications network and a packet
4 transmission network as recited in claim 13, wherein the topology of
5 the hybrid network is analyzed utilizing an internet protocol ping.

1 15. The computer program embodied on a computer-readable medium for
2 directing calls and providing services in a hybrid telecommunications
3 system including a switched communications network and a packet
4 transmission network as recited in claim 13, wherein the topology of
5 the hybrid network is analyzed utilizing an internet protocol trace
6 route.

1 16. The computer program embodied on a computer-readable medium for
2 directing calls and providing services in a hybrid telecommunications
3 system including a switched communications network and a packet
4 transmission network as recited in claim 13, wherein the topology of
5 the hybrid network is analyzed utilizing an internet protocol packet
6 latency.

1 17. The computer program embodied on a computer-readable medium for
2 directing calls and providing services in a hybrid telecommunications
3 system including a switched communications network and a packet
4 transmission network as recited in claim 13, wherein the topology of
5 the hybrid network is analyzed utilizing a packet echo.

1 18. The computer program embodied on a computer-readable medium for
2 directing calls and providing services in a hybrid telecommunications
3 system including a switched communications network and a packet
4 transmission network as recited in claim 13, wherein the topology of
5 the hybrid network is analyzed utilizing an internet protocol ping.

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